

Appl. No. 10/058,324  
Amendment dated  
Reply to Office Action of June 4, 2003

### **REMARKS/ARGUMENTS**

Reconsideration of this application is respectfully requested.

Claims 11-40 are pending in the application with claims 1-10 having been canceled and claims 11-40 having been added.

Claims 6-10 have been objected to because of certain informalities listed by the Examiner. It is submitted that the cancellation of claims 6-10 and the substitution therefor of new claims 11-40 have obviated the Examiner's objection and its withdrawal is respectfully requested.

Further, claims 6-10 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicants regard as their invention.

It is submitted that the cancellation of claims 6-10 and the substitution therefor of new claims 11-40 have rendered this rejection moot and its withdrawal is respectfully requested.

Claims 6-10 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Arney et al. (U.S. Patent No. 6,329,058 B1).

Arney et al. disclose metal oxide particles capable of being highly dispersed in organic materials to form transparent colloids and ceramers. The metal oxide particles have surfaces attached to a dispersing aid and a degree of crystallinity of greater than 55 percent. The crystallite diameter of the metal oxide particles is greater than about 4 nanometers and less

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than about 20 nanometers. Colloids and ceramers prepared using these metal oxide particles and the methods associated with the preparation of the particles, colloids, and ceramers are also disclosed.

As amended, the present claims are directed to the preparation of polyacrylates (which term is intended to include (alk)acrylates, such as methacrylates) from metal aliphatic acryl alkoxides wherein the polyacrylates have nanosized metal oxide particles that are formed *in situ* uniformly dispersed therein. Claims are also presented to the compositions that are prepared thereby, and to the use of such compositions in manufactured articles, particularly those directed to optical applications.

The cited art does not disclose or suggest polyacrylates having nanosized metal oxide particles dispersed in them wherein the metal oxide(s) is formed *in situ*. Rather, Arney et al. teach first preparing and isolating the metal oxide particles, per se, then forming a slurry of the metal oxide in an organic solvent in the presence of a dispersing agent that attaches to the surface of the particles. The slurry is then treated to form a stable colloidal dispersion, flocculated, and centrifuged. It may then be dried to form a powder or dispersed in an organic liquid or solvent to form a colloid or sol, which can be added to a monomer which is then polymerized. Clearly, this process is more complex than that of the present invention and the teaching of Arney et al. would not lead a person of ordinary skill in the art to the present process, which features the *in situ* generation of the metal oxide along with the generation of polymerizable acrylate.

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Accordingly, it is requested that the rejection of claims 6-10 under 35 U.S.C. 103(a) as being unpatentable over be withdrawn.

In view of the foregoing, it is submitted that this application is now in condition for allowance and an early Office Action to that end is earnestly solicited.

Respectfully submitted,

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Date \_\_\_\_\_

  
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